



Approval #

970073-U

Safety & Buildings Division
201 East Washington Avenue
P.O. Box 7969
Madison, WI 53707

Wisconsin Material Approval

Material

PISCES Nonmetallic Underground Secondary Containment
Piping System for Flammable Liquids

Manufacturer

OPW Fueling Components
P.O. Box 405003
Cincinnati, OH 45240

SCOPE OF EVALUATION

The PISCES underground piping system, as manufactured by OPW Fueling Components, was evaluated for use as petroleum product piping for underground storage tank systems in accordance with **section ILHR 10.51 (2)**, of the Wisconsin Administrative Flammable and Combustible Liquids Code.

DESCRIPTION AND USE

The PISCES flexible piping system includes a primary pipe that consists of an inner tube of white Kynar™, a polyester yarn reinforcement layer and backing, and a nonpermeable black nylon outer layer. Secondary containment is provided either by jacketing the primary pipe with a blue polyethylene stand-off layer that is fabricated to produce an interstitial space, by installing the primary pipe in a blue polyethylene corrugated access pipe, or by installing the jacketed version in the access pipe. The access pipe has a smooth inside wall that is intended to improve leak detection capability and liquid recovery, and to allow the primary pipe to be retracted for inspections, repairs, or replacement, without excavation.

The primary pipe has a nominal inside diameter of either 1.5 or 2 inches, is manufactured by the Furon Synflex Division as either Synflex 34C9-24 or 34C9-32, and has a minimum bending radius of 24 inches. The access pipe has a nominal inside diameter of 3 inches and a minimum bending radius of 24 inches.

TESTS AND RESULTS

PISCES Synflex 34C9-24 flexible piping was found to comply with the current Underwriters Laboratories' requirements for this class of piping and is suitable for use in the distribution of petroleum products, alcohols, and alcohol-gasoline mixtures.

LIMITATIONS OF APPROVAL

PISCES Synflex 34C9-24 flexible piping is approved as meeting the design and construction standards for underground piping as specified in **s. ILHR 10.51 (2)** for working pressures up to 75 psig. The pipe is UL listed. The marking for the primary pipe is printed onto the hose at intervals of not more than 10 feet.

PISCES flexible piping includes associated fittings and is approved for installation with or without the flex connectors normally required under **s. ILHR 10.51 (2)(e)**.

PISCES flexible piping is approved for underground (buried) installations only. A maximum of 3 inches of low melting point primary or secondary piping or pipe components may be exposed in an underground sump.

PISCES flexible piping may be used with petroleum products, alcohols, and alcohol-gasoline mixtures.

PISCES flexible piping shall be installed, used, and maintained in accordance with the manufacturer's recommendations, the UL listing, and this approval. In the event of conflicts, the more strict requirement shall govern.

Leak detection for the piping shall be provided in accordance with **s. ILHR 10.60 (2)**. The specific leak detection system must be shown on the plans that are submitted for review in accordance with **s. ILHR 10.10**. Automatic line leak detectors and line tightness testing methods must be specifically approved for use with flexible piping in accordance with **s. ILHR 10.125**. (Note: Evaluation of these leak detection methods with the standard EPA protocol does not demonstrate acceptability of use with flexible piping.)

This approval will be valid through December 31, 2002, unless manufacturing modifications are made to the product or a re-examination is deemed necessary by the Department. The Wisconsin Material Approval Number must be provided when plans that include this product are submitted for review.

DISCLAIMER

The Department is in no way endorsing or advertising this product. This approval addresses only the specified applications for the product and does not waive any code requirement unless specified herein.

Reviewed by: _____

Approval Date: _____ By: _____

Sam Rockweiler, P.E.
Code Development Section
Program Development Bureau